FACT SHEET - King County Noxious Weed Control Program

Garlic mustard

Scientific name: Alliaria petiolata

Plant family: Brassicaceae - the mustard family

The threat: Garlic mustard is considered one of the fastest spreading invasive plants in woodland habitats of North America. In 1999 it was discovered in the Seattle area, and we are working closely with landowners to keep it from spreading. Without cooperation we will lose the battle to keep garlic mustard out of woodland areas throughout Western Washington. Please report all sites to the King County Noxious Weed Control Program.

Plant Description:

A biennial herb growing to 3 feet tall. In early spring the roots and new leaves smell like garlic.



The root usually has a distinct 's' or 'l' shape curve just below the stem. Mature leaves are triangular, becoming smaller toward the top of the plant.



The rosettes have kidney-shaped leaves



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The small, white flowers have 4 petals, 4 sepals and 6 stamens.

Look Alikes:

During the rosette stage, garlic mustard resembles several native plants, including *Viola* spp., fringe cup (*Tellima grandiflora*) and piggy-back plant (*Tolmiea menziesii*). Mature nipplewort plants (*Lapsana communis*) resemble garlic mustard, but the flowers are yellow.

Distribution:

In Washington, the **only** known sites of garlic mustard are from the Seattle area of King County, with the majority of infestations in Seattle Parks, Woodland Park Zoo and neighboring residential neighborhoods.

Locations: Carkeek, Ravenna, lower Woodland Park, Golden Gardens and residential neighborhoods. Areas near the Japanese Garden/Arboretum, Interlaken, Burke Gilman Trail near the University District Motor Pool, Thorton Creek at Jackson Park, Magnuson Park, Longfellow Creek, and the Cheasty Greenspace.

Dispersal:

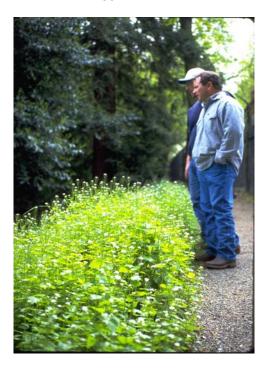
Seeds fall close to the parent plant and they are moved by people, animals and vehicles. Garlic mustard is often initially found along paths and trails, or near parking areas. From these sites, it quickly spreads throughout wooded areas. In Seattle, the spread of garlic mustard is associated with bark and gravel piles used throughout the Seattle Parks system.

Plant Biology:

Garlic mustard is a non-native biennial herb that spreads by seed. It can cross-pollinate or self-pollinate and it can grow in dense shade or sunny sites. Plant stands can produce more than 62,000 seeds per square meter to quickly out compete local flora, changing the structure of plant communities on the forest floor.

In early spring the plants bolt, usually producing one flowering stalk. White flowers usually appear by early May and seed production soon follows in early June. Seedlings develop into basal rosettes by mid summer. They over winter to bolt next spring.

Garlic mustard is considered allelopathic, producing chemicals that inhibit the growth of other plants and mychorrizal fungi. In the Midwest, several butterfly species lay their eggs on this non-native mustard. The eggs hatch, but the larvae die.



Garlic mustard growing along a trailside in Woodland Park.

Legal Control Requirements

Garlic mustard is a Class A noxious weed. The King County Noxious Weed Control Program and the state weed law (RCW 17.10) require eradication. Preventing new infestations and eradicating existing infestations is the highest priority of both the King County and the Washington State Weed Control Boards.

Control Options

Prevention is the recommended control option. Familiarize yourself with the flower, the plant and the habitat where it grows. Monitor sites regularly to remove plants prior to seed set.

Mature plants – hand pulling in the early spring is effective, or cut the flowering stalk to only a few inches above the ground just before flower production. Remove the stems and flowers from the site.

Rosettes –hand-pulling is <u>not</u> recommended. The rosettes tend to snap off at the root, and the plant will re-sprout from the root and continue to grow.

Herbicides are effective on the rosettes. For more information on herbicide control, please contact the King County Noxious Weed Control Program.



Dense carpet of garlic mustard rosettes prevents all other plants from growing in the area. (Photo from Rockford, IL by Victoria Nuzzo.)

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